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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,112	02/01/2002	Curtis E. Adams	00069CON	9977

7590

01/06/2006

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/062,112	ADAMS, CURTIS E.	
	Examiner	Art Unit	
	Callie E. Shosho	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-9,11-13,15-19,22-25,27-29,33 and 49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33 and 49 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-9,11-13,15-19,22-25,27 and 28 is/are rejected.
- 7) ☒ Claim(s) 3 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicant's amendment filed 9/28/05.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-2, 5-13, 15-17, 22-26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betto et al. (U.S. 6,406,606) in view of WO 96/18695.

The rejection is adequately set forth in paragraph 5 of the office action mailed 3/29/05 and is incorporated here by reference.

4. Claims 1-2, 5-9, 11-13, 15-17, 22-25, 27-28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu (U.S. 5,889,083) in view of WO 96/18695.

The rejection is adequately set forth in paragraph 8 of the office action mailed 3/29/05 and is incorporated here by reference.

5. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu in view of WO 96/18695 as applied to claims 1-2, 5-9, 11-13, 15-17, 22-25, 27-28, and 30 above, and further in view of Lin (U.S. 5,997,623).

The rejection is adequately set forth in paragraph 10 of the office action mailed 3/29/05 and is incorporated here by reference.

Response to Arguments

6. Applicant's arguments regarding Takahashi et al. (U.S. 2004/0082686) have been considered but they are moot in view of the discontinuation of the use of this reference against the present claims.

7. Applicant's arguments filed 9/28/05 have been fully considered but, with the exception of arguments relating to Takahashi et al., they are not persuasive.

Specifically, applicant argues that Betto et al. is not a relevant reference against the present claims given that Betto et al. is drawn to electrocoagulation ink while the present claims are all drawn to ink jet inks. Applicant argues that the requirements of these two printing methods are very different and that ink that can be used for one type of printing may not be useable for another type of printing.

However, while it is agreed that Betto et al. is drawn to electrocoagulation ink not ink jet ink, it is the examiner's position that given that Betto et al. disclose ink identical to that presently claimed, i.e. containing self-dispersing pigment, polymer with functional group, and salt, it clear that the ink would intrinsically be capable of functioning as an ink jet ink. While applicant argues that the ink of Betto et al. is not useable for ink jet printing, it is noted that applicant has provided no evidence to support this position. Further, it is noted that "the arguments of counsel cannot take the place of evidence in the record", *In re Schulze*, 346 F.2d 600, 602, 145 USPQ

716, 718 (CCPA 1965). Additionally, applicant does not state that the ink of Betto et al. is not useable as ink jet ink but rather only state that inks for electrocoagulation printing may not be useable in ink jet printing.

Applicant argues that Betto et al. teach away from its ink being capable of functioning as an ink jet ink given that Betto et al. teach that the ink contains multivalent metal ions that chemically bond with the electrolytically coagulatable polymer in the ink thereby increasing the viscosity of the ink which may turn into a gel state and that such gelled ink would not be expected to be ejected from a nozzle of an ink jet printer.

However, applicant has provided no evidence to support the above position, Further, it is significant to note that Betto et al. teach the use of sequestering agent (col.14, lines 47-51) to prevent the ink from gelling.

Applicant argues that there is no motivation to combine Betto et al. with WO 96/18695 given that Betto et al. is drawn to electrocoagulation ink while WO 96/18695 is drawn to ink jet ink.

However, according to MPEP 2141.01 (a), a reference may be relied on as a basis for rejection of an applicant's invention if it is "reasonably pertinent to the particular problem with which the inventor is concerned." A reasonably pertinent reference is further described as one which "even though it maybe in a different field of endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." WO 96/18695 is, therefore, a reasonably pertinent reference, because it teaches that the use of modified pigment such as carbon black having attached functional

groups including carboxyl groups is advantageous in aqueous ink as compared to the use of untreated pigments given that the modified pigment has increased and easy dispersibility and does not require dispersant which is a function especially pertinent to the invention at hand as well as to Betto et al. which disclose the use of untreated pigment in ink.

Applicant argues that even though Zhu and WO 96/18695 relate to the same field of endeavor, the references would not be combined by one skilled in the art given that the ink of Zhu contains polyvalent cationic salt conductivity agent which would cause destabilization of the modified pigment disclosed by WO 96/18695 and thus, one skilled in the art would not replace the conventional pigment of Zhu with modified pigment having attached anionic group of WO 96/18695 given that there would be no reasonable expectation of success. As evidence to support their position, applicant points to paragraph 46 of the present specification.

However, is noted that paragraph 46 of the present specification only discloses that the addition of salt “may” result in flocculation of the pigment. Given that Zhu and WO 96/18695 are each drawn to ink jet inks, given that Zhu discloses the use of “any” pigment, and given that WO 96/18695 teaches that it is advantageous to use modified pigment as presently claimed instead of conventional pigments as disclosed by Zhu, it is the examiner’s position that the combination of Zhu with WO 96/18695 would result in reasonable expectation of success.

Further, with respect to applicant’s arguments regarding JP 2001-081378 and Betto et al. cited by the examiner in the office action mailed 3/29/05 in support of examiner’s position that the combination of polyvalent salt with self-dispersing pigment is known and successfully utilized, while the examiner agrees with applicant’s characterization of JP 2001-081378, with

respect to Betto et al., it is noted that regardless of the type of ink disclosed by Betto et al., there is no disclosure that the salt possessing polyvalent ions would destabilize the self-dispersing pigment. The gelation of the ink in Betto et al. is caused by ions reacting with the electrolytically coagulatable polymer not the pigment.

Allowable Subject Matter

8. Claims 3 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3 and 29 would be allowable if rewritten in independent form as described above given that the “closest” prior art, namely, Betto et al. (U.S. 6,406,606) and Zhu (U.S. 5,889,083), is each drawn to aqueous ink which is in direct contrast to present claims 3 and 29 which require non-aqueous inks.

9. Claims 33 and 49 are allowable over the “closest” prior art, namely, Betto et al. (U.S. 6,406,606) and Zhu (U.S. 5,889,083), given that each reference is each drawn to aqueous ink which is in direct contrast to present claims 33 and 49 which require non-aqueous inks.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

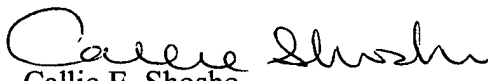
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Callie E. Shosho
Primary Examiner
Art Unit 1714

CS

1/3/06